## HP EliteBook 640 14 inch G10 Notebook PC



## Empowering the hybrid workforce

Simplify hybrid work with the cost-effective, highly secure, and easy to manage HP EliteBook 640. The latest Intel<sup>®</sup> processor<sup>2</sup>, a wide variety of configurable ports, and connectivity options allow easy adoption for use at home, in the office, or when traveling.



\*Product image may differ from actual product

Ready for demanding workloads

- HP recommends Windows 11 Pro for business
- Drive performance with the latest Intel<sup>® 2</sup> processor in the HP EliteBook 640. This globally available and easily serviceable PC now has two USB Type-A (USB 3.2 Gen 1), one Thunderbolt<sup>™</sup> 4 with USB4 Type-C<sup>®</sup> port, and 1 multifunction USB Type-C<sup>®</sup> port.

#### Protected by HP Wolf Security

 HP Wolf Security for Business creates a hardware-enforced, always-on, resilient defense. From the BIOS to the browser, above, in, and below the OS, these constantly evolving solutions help protect your PC from modern threats.<sup>3</sup>

#### Make connections that matter

Take presenting in a hybrid work environment to the next level. Let your audience see you clearly with an optional 5MP IR camera<sup>4</sup> with HP Auto Frame.<sup>5</sup> Enjoy the crystal-clear audio performance delivered by HP Dynamic Voice Leveling<sup>6</sup> and HP AI Noise Reduction.<sup>6</sup>

#### Outer box packaging 100% sustainably sourced

- This PC contains at least 30-percent post-consumer recycled plastic in the bezel, at least 50-percent post-consumer recycled plastic in the keycaps<sup>8</sup>, and the outer box packaging is 100-percent sustainably sourced.<sup>9</sup>
- Manage and monitor your battery's performance and condition and customize charging options with the easy-to-use HP Power Manager dashboard.<sup>7</sup>
- The HD camera with temporal noise reduction lowers the effects of visual noise and pixelation. HP Backlight Adjustment includes dual image sensors, that balance contrast, background, and foreground lighting so you can capture all the details.<sup>6</sup>
- This PC contains at least 30-percent post-consumer recycled plastic in the bezel, at least 50-percent post-consumer recycled plastic in the keycaps, and the outer box packaging is 100-percent sustainably sourced.<sup>8,9</sup>
- Move around a little without losing viewers' attention during video calls with optional HP Auto Frame.<sup>4,5</sup>
- A creative powerhouse that inspires. Take on big projects utilizing multiple applications with the latest Intel<sup>®</sup> processor, NVIDIA<sup>®</sup> GeForce RTX<sup>™</sup> 2050 graphics, up to 64GB DDR4 memory and up to 2TB of storage.<sup>2,10,11</sup>
- Help speed up image creation and the management of hardware, BIOS, and security when managing devices through Microsoft Endpoint Manager with the HP Manageability Integration Kit.<sup>12</sup>
- HP Dynamic Voice Leveling automatically optimizes voice clarity within 3-meters of the PC. HP AI Noise Reduction uses noisefiltering technology to enhance audio conferencing experience even while wearing a mask.<sup>6</sup>
- Firmware attacks can completely devastate your PC. Stay protected with HP Sure Start Gen7, the self-healing BIOS that automatically recovers itself from attacks or corruption.<sup>13</sup>
- Stop unwanted changes to security settings and help limit the spread of malware with HP Sure Run Gen5 which identifies, quarantines, and provides reporting on attackers trying to kill processes.<sup>14</sup>
- Instantly block prying eyes' ability to view your screen with optional HP Sure View Reflect that produces a copper reflective finish when the screen is viewed from the side making it appear unreadable.<sup>15</sup>
- HP Sure Recover Gen5 ensures fast, secure, and automated recovery of the OS over LAN or Wi-Fi® from advanced malware attacks. End users can now pause or retry if the connection is lost and it's corporate image ready for fleet deployments.<sup>16</sup>
- Help protect your PC from websites and read-only Microsoft Office and PDF attachments with malware, ransomware, or viruses with hardware-enforced security from HP Sure Click.<sup>17</sup>

## HP EliteBook 640 14 inch G10 Notebook PC Specifications Table



## \*Product image may differ from actual product

Froduct image may differ from actual product	
Available Operating Systems	Windows 11 Pro1 Windows 11 Pro Education <sup>1</sup> Windows 11 Hone – HP recommends Windows 11 Pro for business <sup>1</sup> Windows 11 Hone Single Language – HP recommends Windows 11 Pro for business <sup>1</sup> Windows 11 Pro (Windows 11 Enterprise or Windows 10 Enterprise available with a Volume Licensing Agreement) <sup>1</sup> Windows 11 Pro (preinstalled with Windows 10 Pro Downgrade) <sup>1,2</sup> FreeDOS
Processor family	13th Generation Intel® Core <sup>34</sup> 17 processor; 13th Generation Intel® Core <sup>34</sup> i5 processor; 13th Generation Intel® Core <sup>34</sup> i5 processor
Available Processors <sup>3,4,5</sup>	Intel® Core™ 17-1355U (1.2 GHz E-core base frequency, 1.7 GHz P-core base frequency, up to 3.7 GHz E-core Max Turbo frequency, up to 5.0 GHz P-core Max Turbo frequency, 12 MB L3 cache, 2 P-cores and 8 E-core, 12 threads); Intel® Core™ 15-1335U (0.9 GHz E-core base frequency, 1.2 GHz P-core base frequency, up to 3.6 GHz E-core Max Turbo frequency, up to 4.6 GHz P-core Max Turbo frequency, 12 MB L3 cache, 2 P-cores and 8 E-core, 18 threads); Intel® Core™ 15-1335U (1.4 GHz E-core base frequency, up to 3.6 GHz E-core Max Turbo frequency, up to 3.6 GHz E-core Max Turbo frequency, up to 3.6 GHz E-core Max Turbo frequency, 12 MB L3 cache, 2 P-cores and 8 E-core, 10 threads); Intel® Core™ 15-1335U (1.4 GHz E-core base frequency, up to 3.6 GHz E-core Max Turbo frequency, up to 5.2 GHz P-core Max Turbo frequency, 24 MB L3 cache, 6 P-cores and 8 E-core, 2 threads); Intel® (Core™ 15-1365U (1.4 GHz E-core base frequency, up to 3.6 GHz E-core Max Turbo frequency, up to 5.2 GHz P-core Max Turbo frequency, 12 MB L3 cache, 2 P-cores and 8 E-core, 12 threads); Intel® (Core™ 15-1365U (1.4 GHz E-core base frequency, 12 MB L3 cache, 2 P-cores and 8 E-core, 14 threads); Intel® (Core™ 15-1365U (1.2 GHz E-core base frequency, 12 M3 L3 cache, 2 P-cores and 8 E-core, 14 threads); Intel® (Core™ 15-1365U (1.2 GHz E-core base frequency, 12 M5 L3 cache, 2 P-cores and 8 E-core, 14 threads); Intel® (Core™ 15-1365U (1.2 GHz E-core base frequency, 12 M5 L3 cache, 2 P-cores and 8 E-core, 12 threads); Intel® (Core™ 15-1365U (1.2 GHz E-core base frequency, 12 M5 L3 cache, 2 P-cores and 8 E-core, 12 threads); Intel® (Core™ 15-1365U (1.2 GHz E-core base frequency, 12 M5 L3 cache, 2 P-core base frequency, 10 to 3.5 GHz E-core Max Turbo frequency, 10 th 4.5 GHz P-core base frequency, 12 M5 L3 cache, 2 P-cores Max Turbo frequency, 10 to 4.5 GHz P-core Max Turbo frequency, 10 th 4.5 GHz P
Maximum memory	64 GB DDR4-3200 MHz RAM ##memspd_01## ##memtype_01## <sup>7</sup> ##memmax_02## ##memspd_02## ##memtype_02## ##memmax_03## ##memspd_03## #Mmemtype_03## Both slots are accessible/upgradeable by IT or self-maintainers only. Supports dual channel memory. Both slots are accessible/upgradeable by IT or self-maintainers only. Supports dual channel memory.
Memory slots	2 SODIMM
Internal storage	1 TB up to 2 TB PCle <sup>®</sup> NVMe <sup>IM</sup> M.2 SSD TLC <sup>B</sup> 512 GB up to 1 TB PCle <sup>®</sup> NVMe <sup>IM</sup> M.2 SED SSD TLC <sup>B</sup> up to 512 GB PCle <sup>®</sup> (centavi NVMe <sup>IM</sup> M.2 SED SSD TLC <sup>B</sup>
Display size (diagonal, metric)	35.6 cm (14°)
Display	14" diagonal, FHD (1920 x 1080), IPS, narrow bezel, anti-glare, 400 nits, low power, 72% NTSC; 14" diagonal, FHD (1920 x 1080), IPS, narrow bezel, anti-glare, 250 nits, 45% NTSC; 14" diagonal, FHD (1920 x 1080), IPS, narrow bezel, anti-glare, 250 nits, 45% NTSC; 14" diagonal, FHD (1920 x 1080), IPS, narrow bezel, anti-glare, 250 nits, 45% NTSC; 14" diagonal, FHD (1920 x 1080), IPS, narrow bezel, anti-glare, 250 nits, 45% NTSC; 14" diagonal, FHD (1920 x 1080), IPS, narrow bezel, anti-glare, 250 nits, 45% NTSC; 14" diagonal, FHD (1920 x 1080), IPS, narrow bezel, anti-glare, 1000 nits, 100% sRGB, HP Sure View integrated privacy screen with HP Eye Ease <sup>13, 15, 16, 17</sup>
	3.5.6 cm (147) degonal, FH0 (1920x 1080), touch, narrow bezel, anti-glare, 250 nits, 45% NTSC; 35.6 cm (147) degonal, FH0 (1920 x 1080), IPS, narrow bezel, anti-glare, 400 nits, low power, 72% NTSC; 35.6 cm (147) degonal, FH0 (1920 x 1080), IPS, narrow bezel, anti-glare, 250 nits, 45% NTSC; 35.6 cm (147) degonal, FH0 (1920 x 1080), IPS, narrow bezel, anti-glare, 250 nits, 45% NTSC; 35.6 cm (147) degonal, FH0 (1920 x 1080), IPS, narrow bezel, anti-glare, 250 nits, 45% NTSC; 35.6 cm (147) degonal, FH0 (1920 x 1080), IPS, narrow bezel, anti-glare, 1000 nits, 100% sRGB, HP Sure View integrated privacy screen with HP Eye Ease <sup>13,15,15,17</sup>
Available Graphics	Integrated: Intel <sup>®</sup> (UHD Graphics; Intel <sup>®</sup> Nic <sup>®</sup> % Graphics <sup>12,13</sup> Discrete: NUDIA <sup>®</sup> Geforce RTX <sup>™</sup> 2050 Laptop GPU (4 G6 GDDR6 dedicated) <sup>42</sup> (Support CLDA, Optimus, PhysX, GPU Boost 2.0.)
Audio	Dual stereo speakers, dual array microphones
Wireless technologies	(Compatible with Miracast-certified devices.)
Ports and Connectors	1 USB Type-C* 40Gbps signaling rate (USB Power Delivery, DisplayPort* 1.4); 2 USB Type-A SGbps signaling rate (1 charging); 1 AC power; 1 HDMI 2.1; 1 stereo headphone/microphone combo jack; 1 RJ-45; (HDMI cable sold separately.); Optional Ports: 1 Smartcad reader (optional); 1 External Nano SIM slot for WWAN <sup>18</sup>
Input devices	HP Premium Keyboard – spill resistant, optional backlik keyboard <sup>14</sup> ; Clickpad with multi-touch gesture support;
Communications	Intel® 1219-LM Gbe LDM, vPro®; Intel® 1219-LM Gbe LDM, non-vPro® <sup>11</sup> ; Intel® Wi-Fi GE AX211 (2x2) and Bluetooth® 5.3 wireless card, vPro®; Intel® Wi-Fi GE AX211 (2x2) and Bluetooth® 5.3 wireless card, non-vPro® <sup>9,10</sup> ; Intel® XMM® 7560 LTE Advanced Pro; Qualcomm® 9205 LTE Cat-M1; Near Field Communication (NFC) module
Camera	720p HD camera with temporal noise reduction (select models); IR Camera (select models) <sup>13,18</sup>
Software	HP Connection Optimizer; HP Hotkey Support; HP Power Manager; myHP; HP Privacy Settings; HP Notifications; HP PC Hardware Diagnostics Windows; HP Services Scan; HP Smart Support (download); Buy Office (Sold separately) <sup>2021,19,2719</sup>
Security management	Absolute persistence module; HP Secure Erase; HP Sure Click; HP Sure Sense; BIOS Update via Network; HP Sure Admin; HP BIOSphere Gen6; HP Client Security Manager Gen7; TPM 2.0 embedded security chip (Common Criteria EAL4+ and FIPS 140-2 Level 2 Certified); HP Sure Start Gen7; HP Wake on WLAN; HP Tamper Lock; HP Sure Rum Gen5; HP Sure Recover Gen5; Secured-Core PC Enable; <sup>252,627,28,29,30,31,22,33,34</sup>
Security Software Licenses	HP Wolf Pro Security Edition <sup>56</sup>
Management features	HP Client Management Script Library (download); HP Driver Packs (download); HP Client Catalog (download); HP Manageability Integration Kit Gen4 (download); HP Image Assistant Gen5 (download); HP Patch Assistant (download); HP Client Catalog (download); HP Manageability Integration Kit Gen4 (download); HP Image Assistant Gen5 (download); HP Patch Assistant (download); HP Client Catalog (download); HP Manageability Integration Kit Gen4 (download); HP Image Assistant Gen5 (download); HP Patch Assistant (download); HP Client Catalog (download); HP Manageability Integration Kit Gen4 (download); HP Image Assistant Gen5 (download); HP Patch Assistant (download); HP Client Catalog (download); HP Manageability Integration Kit Gen4 (download); HP Image Assistant Gen5 (download); HP Patch Assistant (download); HP Client Catalog (download); HP Manageability Integration Kit Gen4 (download); HP Image Assistant Gen5 (download); HP Patch Assistant (download); HP Client Catalog (download); HP Manageability Integration Kit Gen4 (download); HP Image Assistant Gen5 (download); HP Patch Assistant (download); HP Client Catalog (download); HP Client C
Power	HP Smart 65 W External AC power adapter; HP Smart 65 W EM External AC power adapter; HP Smart 45 W External AC power adapter; HP Smart 45 W 2-prong External AC power adapter; HP Smart 65 W USB Type-C*
Battery type	HP Long Life 3-cell, 42.75 Wh polymer <sup>36</sup>
Dimensions	12.67 x 8.42 x 0.78 in; 32.19 x 21.39 x 1.99 cm
Weight	Starting at 3.13 lb; Starting at 1.41 kg; (Weight will vary by configuration. Does not include power adapter.)
Ecolabels	CECP; IT ECO Declaration; EPEAT® Gold registered in the U.S.; SEPA; Taiwan Green Mark; Japan PC Green Label; KOECO; TCO Certified <sup>39</sup>
Energy star certified (series fixed)	ENERGY STAR® certified
Certification and compliance	CCC; CECP; GS Mark
	Low Halogen; Bulk packaging available; Molded paper pulp cushion inside box is 100% sustainably sourced and recyclable; Outside box and corrugated cushions are 100% sustainably sourced and recyclable; S% post-
Sustainable impact specifications	consumer recycled plastic; Ocean-bound plastic in speaker enclosure(s) <sup>40,43,44,45</sup> 1-year and 3-year limited warranties and 90 day software limited warranty options depending on country. Batteries have a default one year limited warranty. Refer to http://www.hp.com/support/batterywarranty/ for

## HP recommends Windows 11 Pro for business

## HP EliteBook 640 14 inch G10 Notebook PC

### Messaging Footnotes

Multicore is designed to improve performance of certain software products. Not all customers or software applications will necessarily benefit from use of this technology. Performance and clock frequency will vary depending on application workload and your

hardware and software configurations. Intel<sup>®</sup> numbering, branding and/or naming is not a measurement of higher performance. <sup>1</sup> Optional feature must be configured at time of purchase

<sup>5</sup> HP Auto Frame available only with optional 5MP camera that must be configured at purchase. Requires the mvHP application and Windows OS.

Requires the myHP application and Windows OS.

<sup>7</sup> HP Power Manager requires Windows 10 and higher and is available from the Microsoft store <sup>8</sup> Recycled plastic content percentage is based on the definition set in the IEEE 1680.1-2018 standard.

<sup>10</sup> Otok outer box packaging made from sustainably sourced certified and recycled fibers. Fiber cushions made from 100% recycled wood fiber and organic material. Any plastic cushions are made from >90% recycled plastic. <sup>10</sup> Sold separately or as an optional feature.

<sup>1</sup> Sold separately or as an optional feature. For storage drives, GB = 1 billion bytes, TB = 1 trillion bytes, Actual formatted capacity is less. Up to 30GB (for Windows) of disk is reserved for system recovery software

<sup>12</sup> HP Manageability Integration Kit can be downloaded from http://www8.hp.com/us/en/ads/clientmanagement/overview.html.
 <sup>13</sup> HP Sure Start Gen7 is available on select HP PCs and requires Windows 10 Pro and higher.
 <sup>14</sup> HP Sure Run Gen5 is available on select HP PCs and requires Windows 10 Pro and higher.

<sup>15</sup> HP Sure Recover Gen5 is available on select the PCs and requires Windows 10 Pro and higher and an open network connection. <sup>16</sup> HP Sure Recover Gen5 is available on select HP PCs and requires Windows 10 Pro and higher and an open network connection. You must back up important files, data, photos, videos, etc. before using HP Sure Recover to avoid loss of data. Network based recovery using Wi-Fi is only available on PCs with Intel Wi-Fi Module.

<sup>17</sup> HP Sure Click requires Windows 10 and higher. See https://bit.ly/2PrLT6A\_SureClick for complete details.

#### **Technical Specifications Footnotes**

<sup>1</sup> Not all features are available in all editions or versions of Windows. Systems may require upgraded and/or separately purchased hardware, drivers, software or BIOS update to take full advantage of Windows functionality. Windows is automatically updated and enabled. High speed internet and Microsoft account required. ISP fees may apply and additional requirements may apply over time for updates. See http://www.windows.com.

<sup>2</sup> This computer is preinstalled with Windows [insert Product version/edition name] Home Single Language. <sup>3</sup> Multicore is designed to improve performance of certain software products. Not all customers or software applications will necessarily benefit from use of this technology. Performance and clock frequency will vary depending on application workload and your hardware and software configurations. Intel's numbering, branding and/or naming is not a measurement of higher performance.

 <sup>4</sup> Processor speed denotes maximum performance mode; processors will run at lower speed in battery optimization mode.
 <sup>5</sup> Intel<sup>®</sup> Turbo Boost performance varies depending on hardware, software and overall system configuration. See www.intel.com/technology/turboboost for more information.
 <sup>6</sup> In accordance with Microsoft's support policy, HP does not support the Windows 8 or Windows 7 drivers on http://www.support.hp.com

<sup>7</sup> Due to the non-industry standard nature of some third-party memory modules, we recommend HP branded memory to ensure compatibility. If you mix memory speeds, the system will perform at the lower memory spe <sup>8</sup> For storage drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 30 GB (for Windows 10 and 11) is reserved for system recovery software.

9 Wi-Fi 6E requires a Wi-Fi 6E router, and Windows 11, to function in the 6GHz band. Availability of public wireless access points limited. Wi-Fi 6E is backwards compatible with prior 802.11 specs. And available in countries where Wi-Fi 6E is supported.

<sup>10</sup> Miracast is a wireless technology your PC can use to project your screen to TVs, projectors, and streaming. <sup>11</sup> The term \*10/100/1000\* or "Gigabit" Ethernet indicates compatibility with IEEE standard 802.3ab for Gigabit Ethernet, and does not connote actual operating speed of 1 Gb/s. For high-speed transmission, connection to a Gigabit Ethernet server and network infrastructure is required.

<sup>12</sup> Intel<sup>®</sup> (is<sup>®</sup> × Graphics capabilities require system to be configured with Intel<sup>®</sup> Core<sup>™</sup> i5 or i7 processors and dual channel memory. Intel<sup>®</sup> Iris<sup>®</sup> × Graphics with Intel<sup>®</sup> Core<sup>™</sup> i5 or 7 processors and single channel memory will only function as UHD graphics <sup>13</sup> HD content required to view HD images.

<sup>14</sup> Backlit keyboard is an optional feature

<sup>13</sup> Resolutions are dependent upon monitor capability, and resolution and color depth settings.
 <sup>16</sup> HP Sure View Reflect integrated privacy screen is an optional feature that must be configured at purchase and is designed to function in landscape orientation.
 <sup>17</sup> Actual brightness will be lower with touchscreen or Sure View.

<sup>18</sup> Sold separately or as an optional feature.
 <sup>19</sup> Microsoft Office sold separately and requires Internet access for activation <sup>20</sup> HP Support Assistant requires Windows and Internet access.

<sup>24</sup> HP Support Assistant requires windows and internet access. <sup>21</sup> HP Services Scan is provided with Windows Update on select products and will check entitlement on each hardware device to determine if an HP TechPulse-enabled service has been purchased, and will download applicable software automatically. HP TechPulse is a telemetry and analytics platform that provides critical data around devices and applications. For full system requirements or to disable this feature, please visit http://www.hpdaas.com/requirements . Not applicable in China. 22 HP Connect for Microsoft Endpoint Manager is available from the Azure Market Place for HP Pro, Elite, Z and Point-of-Sale PCs managed with Microsoft Endpoint Manager. Subscription to Microsoft Endpoint Manager required and sold separately. Network

<sup>23</sup> HP Patch Assistant available on select HP PCs with the HP Manageability Kit that are managed through Microsoft System Center Configuration Manager. HP Manageability Integration Kit can be downloaded from http://www8.hp.com/us/en/ads/clientmanagement/overview.html.

http://www8.hp.com/us/en/ads/clientmanagement/overview.html

<sup>25</sup> HP Sure Click requires Windows 10 Pro or higher or Enterprise. See https://bit.ly/2PtLT6A\_SureClick for complete details.
<sup>26</sup> HP Sure Sense is available on select HP PCs with Windows 10 Pro, Windows 10 Enterprise, Windows 11 Pro, or Windows 11 Enterprise 0525. HP Sure Run Gen5 is available on select HP PCs and requires Windows 10 and higher.26. HP Sure Recover Gen5 will Embedded Reimaging is an optional feature which requires Windows 10 and higher must be configured at purchase. You must back up important files, data, photos, videos, etc. before use to avoid loss of data. Network based recovery using Wi-Fi is only available on Cs with Intel Wi-Fi Module. HP Sure Run Gen5 is available on select HP PCs and requires Windows 10 and higher

28 HP Sure Recover Gen5 with Embedded Reimaging is an optional feature which requires Windows 10 and higher must be configured at purchase. You must back up important files, data, photos, videos, etc. before use to avoid loss of data. Network based recovery <sup>29</sup> HP Sure Start Gen7 is available on PCs with Intel Wi-FI Module.
 <sup>29</sup> HP Sure Start Gen7 is available on select HP PCs and requires Windows 10 and higher.
 <sup>30</sup> HP Client Security Manager Gen7 requires Windows and is available on the select HP Elite and Pro PCs.

<sup>31</sup> HP BIOSphere Gen6 features may vary depending on the platform and configuration. <sup>32</sup> HP Secure Erase for the methods outlined in the National Institute of Standards and Technology Special Publication 800-88 "Clear" sanitation method. HP Secure Erase does not support platforms with Intel® Optane™. <sup>33</sup> Absolute firmware module is shipped turned off and can only be activated with the purchase a license subscription and full activation of the software agent. License subscriptions can be purchased for terms ranging multiple years. Service is limited, check with Absolute for availability outside the U.S. Certain conditions apply. For full details visit: https://www.absolute.com/about/legal/agreements/absolute/ <sup>34</sup> Secured-Core PC Enable requires an Intel® vPro® , AMD Ryzen™ Pro processor or Qualcomm® processor with SD850 or higher and requires 8 GB or more system memory. Secured-core PC is enabled from the factory. <sup>35</sup> HP Fingerprint sensor is an optional feature that must be configured at purchase.

<sup>36</sup> Actual battery Watt-hours (Wh) will vary from design capacity. Battery capacity will naturally decrease with shelf life, time, usage, environment, temperature, system configuration, loaded apps, features, power management settings and other factors.
 <sup>37</sup> Availability may vary by country.
 <sup>38</sup> HP Power Manager requires Windows 10 and higher and can be downloaded from the Microsoft Store.

# <sup>14</sup> Prover Manager requires Wincows to allo ingine and can be dowinicoded itom the microson source. <sup>36</sup> Based on US EPFAP\* registration according to IEEE 1680...2018 EPEAP\* of source and source and the microson source. <sup>40</sup> External power supplies, power cords, cables and peripherals are not Low Halogen. Service parts obtained after purchase may not be Low Halogen. <sup>41</sup> Secondary SSD slot (M.2 2230 form factor; Optional) is used for data storage only, not used for OS deployment, and is only available with non-WWAN base Unit AND Primary M.2 storage. <sup>42</sup> Integrated graphics depends on processor. WIDIA® Optimus™ technology, full enablement of all discrete graphics video and display features may not be supported on all systems (e.g. OpenGL applications will run on the integrated GPU or the APU as the case may be). <sup>43</sup> Integrated power source discrete and curving and form sustainabilit curver (artified and recurled fibers).

 <sup>44</sup> 100% outer box packaging and corrugated cushions made from sustainably sourced certified and recycled fibers.
 <sup>45</sup> Molded pulp cushions made from 100% recycled wood fiber and organic materials.
 <sup>56</sup> HP Wolf Pro Security Edition (including HP Sure Click Pro and HP Sure Sense Pro) is available preloaded on select SKUs and, depending on the HP product purchased, includes a paid 1-year or 3-year license. The HP Wolf Pro Security Edition software is licensed under the license terms of the HP Wolf Security Software - End-User license Agreement (EULA) that can be found at: https://support.hp.com/us-en/document/ish\_3875769-3873014-16 as that EULA is modified by the following: "7. Term. Unless otherwise terminated earlier pursuant to the terms contained in this EULA, the license for the HP Wolf Pro Security Edition (HP Sure Sense Pro and HP Sure Click Pro) is effective upon activation and will continue for either a twelve (12) month or thirty-six (36) month license term ("initial Term"). At the end of the initial Term you may either (a) purchase a renewal license for the HP Wolf Pro Security Edition from HP.com, HP Sales or an HP Channel Partner, or (b) continue using the standard versions of HP Sure Click and HP Sure Set additional cost with no future software updates or HP Support." <sup>57</sup> HP Smart Support requires HP TechPulse to be installed. For more information about how to enable or to download HP Smart Support, please visit http://www.hp.com/smart-support.

## Sign up for updates hp.com/go/getupdated

© Copyright 2023 HP Development Company, L.P. The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein

Intel, Core, Iris and Intel vPro are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries. Bluetooth is a trademark owned by its proprietor and used by HP Inc. under license. DisplayPort<sup>™</sup> and the DisplayPort<sup>™</sup> logo are trademarks owned by the Video Electronics Standards Association (VESA®) in the United States and other countries. NVIDIA, the NVIDIA logo are trademarks and/or registered trademarks of NVIDIA Corporation in the U.S. and other countries. USB Type-C® and USB-C® are registered trademarks of USB Implementers Forum. ENERGY STAR is a registered trademark of the U.S. Environmental Protection Agency. All other trademarks are the property of their respective owners

